

What is claimed is:

- 1           1. A fluid quick connector comprising:  
2           a connector housing configured to mate with a male endform; and  
3           an electrically conductive contact member mounted in the housing and  
4           contacting the male endform to electrically connect the male endform and the quick  
5           connector housing.



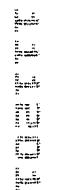
2. The fluid quick connector of claim 1 wherein the contact member comprises:

a first portion mountable in the quick connector housing bore in contact with the quick connector housing; and

at least one arm extending from the first portion for contact with the male endform.



- 1                   3. The fluid quick connector of claim 2 further comprising:  
2                   the arm extendable through an open end of the bore in the male  
3                   endform in contact with a surface of the male endform.



- 1                  4. The fluid quick connector of claim 3 further comprising:  
2                  the arm having a bent end extendable into the male endform.



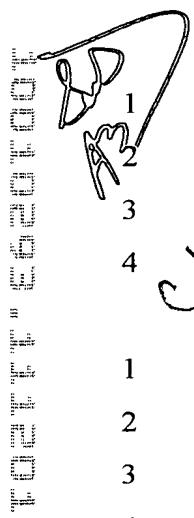
5. The fluid quick connector of claim 4 wherein the arm and the  
2 bent end comprise:  
3           a beam portion extending from the first portion of the contact member;  
4           a back taper surface extending angularly from the beam portion; and  
5           a tip end extending angularly from an edge at one end of the back taper  
6           surface and defining a lead-in surface adapted to be engaged by a tip end of the  
7           endform.



- 1                         6.       The fluid quick connector of claim 5 wherein:

2                   the back taper surface extends at an obtuse included angle with respect  
 3                   to the beam; and  
 4                   the tip end extends at an obtuse included angle from the back taper  
 5                   surface.

1                   7.       The fluid quick connector of claim 3 wherein the first portion  
 2                   comprises:  
 3                   a tubular body mountable in the bore in the quick connector housing,  
 4                   the arm extending from one end of the tubular body.



1                   8.       The fluid quick connector of claim 7 wherein:  
 2                   the tubular body is longitudinally split to form spaced edges allowing  
 3                   compression of the tubular body for press-fit mounting of the tubular body in the  
 4                   bore in the quick connector housing.

1                   9.       The fluid quick connector of claim 7 wherein the tubular body  
 2                   further comprises:  
 3                   another end oppositely formed from the one end of the body, a lead-in  
 4                   edge formed on the another end.

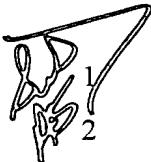
1                   10.      The fluid quick connector of claim 2 wherein the first portion of  
 2                   the contact member comprises:  
 3                   an annular ring mountable in the bore in the quick connector housing,  
 4                   the arm extending from the annular ring.



1                   11.      The fluid quick connector of claim 10 further comprising:  
 2                   the arm having a bent end extendable through an open end of a bore in  
 3                   the male endform.

1                   12.      The fluid quick connector of claim 10 further comprising:

2 at least one finger extending angularly from the annular ring of the  
3 contact member, the at least one finger engagable with an end of the male endform.

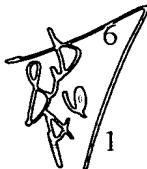


13. The fluid quick connector of claim 10 wherein:  
the annular ring is mountable in registry with a shoulder between two  
3 stepped bore portions of the through bore in the quick connector housing.

14. The fluid quick connector of claim 1 further comprising:  
2 the quick connector housing and the male endform being formed of an  
3 electrically conductive material.

15. A fluid quick connector comprising:  
2 a connector housing configured to mate with a male endform along a  
3 first axis;  
4 the quick connector housing and the male endform being formed of an  
5 electrically conductive material; and  
6 a contact member having a first portion fixedly mountable in a bore in  
7 the housing, and an arm extending from the first portion adapted to extend through an  
8 open end of a bore in the male endform to dispose the arm in contact with the male  
9 endform.

16. An electrical contact for a fluid quick connector having a  
2 connector housing configured to mate with a male endform, the electrical contact  
3 comprising:  
4 an electrically conductive contact member adapted to mount in a quick  
5 connector housing to electrically connect a male endform inserted into the housing to  
the quick connector housing.



17. The electrical contact of claim 16 wherein the contact member  
2 comprises:  
3 a first portion adapted to be mountable in the quick connector housing

4 bore in contact with the quick connector housing; and  
5 an arm extending from the first portion adapted for contact with the  
6 male endform inserted into the housing bore.

1 18. The electrical contact of claim 17 further comprising:  
2 the arm adapted to be extendable through an open end of the bore in the  
3 male endform into contact with a surface of the male endform.

1 19. The electrical contact of claim 18 further comprising:  
2 the arm having a bent end adapted to be extendable into the male  
3 endform.

1 20. The electrical contact of claim 19 wherein the arm and the bent  
2 end comprise:  
3 a beam portion extending from the first portion of the contact member;  
4 a back taper surface extending angularly from the beam portion; and  
5 a tip end extending angularly from an edge at one end of the back taper  
6 surface and defining a lead-in surface adapted to be engaged by a tip end of the  
7 endform.

1 21. The electrical contact of claim 20 wherein the arm and the bent  
2 end comprise:  
3 the back taper surface extends at an obtuse included angle with respect  
4 to the beam; and  
5 the tip end extends at an obtuse included angle from the back taper  
6 surface.

1 22. The electrical contact of claim 17 wherein the first portion of  
2 the contact member comprises:  
3 a tubular body adapted to be mountable in the bore in the quick  
4 connector housing, the arm extending from one end of the tubular body.

1           23. The electrical contact of claim 22 wherein:  
2           the tubular body is longitudinally split to form spaced edges allowing  
3           compression of the tubular body for press-fit mounting of the tubular body in the  
4           bore in the quick connector housing.

1           24. The electrical contact of claim 22 wherein the tubular body  
2           further comprises:  
3           another end oppositely formed from the one end of the body, a lead-in  
4           edge formed on the another end.

1           25. The electrical contact of claim 17 wherein the first portion of  
2           the contact member comprises:  
3           an annular ring adapted to be mountable in the bore in the quick  
4           connector housing, the arm extending from the annular ring.

1           26. The electrical contact of claim 25 further comprising:  
2           the arm having a bent end adapted to extend through an open end of a  
3           bore in the male endform.

1           27. The electrical contact of claim 25 further comprising:  
2           at least one finger extending angularly from the annular ring of the  
3           contact member, the at least one finger adapted to engage the housing bore.

1           28. The electrical contact of claim 25 wherein:  
2           the annular ring is adapted to be mounted in registry with a shoulder  
3           between two stepped bore portions of the through bore in the quick connector  
4           housing.

- 1           29. An electrical contact for a fluid quick connector having a  
2 connector housing configured to mate with a male endform, the electrical contact  
3 comprising:  
4                 a contact member having a first portion fixedly adapted to be  
5 mountable in a bore in the housing, and an arm extending from the first portion  
6 adapted to extend into contact with the male endform.

30010203 442604